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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/914,185 | 08/23/2001 | Charles W. Propst Jr | TPP 30482 A | 9479 |

7590 04/13/2005
Thomas P Pavelko
Stevens Davis Miller & Mosher
Suite 850
1615 L Street NW
Washington, DC 20036

EXAMINER

BRUENJES, CHRISTOPHER P

ART UNIT PAPER NUMBER

1772

DATE MAILED: 04/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

15 M

Office Action Summary

| | | |
|---|--|--|
| Application No. 09/914,185 | Applicant(s) PROPST JR, CHARLES W. | |
| Examiner Christopher P Bruenjes | Art Unit 1772 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 02 March 2005.
- 2a) This action is **FINAL**.
- 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 5,7,10-13,15-18 and 20 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 5,7,10-13,15-18 and 20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 - Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 - Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____.
 - 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 2, 2005 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5, 7, 10-13, 15-18, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 5, the limitation "aqueous" methyl methacrylate resin base, renders the claim vague and indefinite.

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It is not understood if the limitation that the methyl methacrylate resin base is aqueous is referring to the final product in which some way the coating is an aqueous solution in contact with the paper or if "aqueous" is referring to an intermediate product in which the coating is formed as an aqueous solution and then solidified by drying, in which case in the final product methyl methacrylate resin base would not be aqueous, but instead a solid. For examination purposes in light of the specification it is determined that "aqueous" is referring to an intermediate solution prior to drying and forming a solid layer. Clarification is needed.

Regarding claims, 7, 13, and 18, the limitation "aqueous" dispersion of zinc oxide particles, renders the claim vague and indefinite. It is not understood if the limitation that the dispersion of zinc oxide particles is aqueous is referring to the final product in which some way the coating is an aqueous solution in contact with the paper or if "aqueous" is referring to an intermediate product in which the coating is formed as an aqueous solution and then solidified by drying, in which case in the final product the dispersion of zinc oxide particles would not be aqueous, but instead a solid. For examination purposes in light of the specification it is determined that "aqueous" is

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referring to an intermediate solution prior to drying and forming a solid layer. Clarification is needed.

Regarding claims 5, 7, 10, 13, 15, and 18, the limitation "optionally zinc oxide" in claims 5, 10, and 15, and the limitation "further comprising an aqueous dispersion of zinc oxide particles in claims 7, 13, and 18, render the claims vague and indefinite. It is not understood if the further comprising limitation of the dependent claims are merely stating that the optional limitation in the independent is mandatory in the dependent or if the optional zinc oxide is a separate component of the composition from the aqueous dispersion of zinc oxide particles in the dependent claims.

Regarding claims 10 and 15, the limitation "aqueous" acrylic resin base, renders the claim vague and indefinite. It is not understood if the limitation that the acrylic resin base is aqueous is referring to the final product in which some way the coating is an aqueous solution in contact with the other layers or if "aqueous" is referring to an intermediate product in which the composition is formed as an aqueous solution and then solidified by drying, in which case in the final product the acrylic resin base would not be aqueous, but instead be a solid. For examination purposes in light of the specification it is determined that "aqueous" is referring to an intermediate

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solution prior to drying and forming a solid layer.

Clarification is needed.

Claim Rejections - 35 USC § 103

REPEATED REJECTIONS

3. The 35 U.S.C. 103 rejections of claims 5 and 7 over Shaw in view of Sugimoto are repeated for the reasons set forth in the previous Office Action mailed September 2, 2004, Pages 5-6 Paragraph 6.

Regarding the newly added limitation to claim 5 that the composition comprises an aqueous methyl methacrylate resin base, Shaw teaches that the film forming resin is colloiddally dispersible in water (col.2, 1.50-52). Therefore, Shaw teaches that the methyl methacrylate resin base of the film forming resin is aqueous before being formed into a resin. Regarding the newly added limitation to claim 7 that the zinc oxide particles are an aqueous dispersion of zinc oxide particles, the limitation that the zinc oxide particles are in an aqueous dispersion during the formation of the article receives little patentable weight in an article claim. Articles are defined by the final structure of the product and not the intermediate steps of the materials used to form the article. Although all limitations are given consideration, patentability lays in the

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structure not the method of making the article. See MPEP 2113. In this case, in light of the instant specification, the aqueous dispersion of zinc oxide particles claimed is merely the intermediate product and that the dispersion is formed into a final product such as a coating, laminae, or self-sustaining film. Therefore, in order to form that coating, laminae, or self-sustaining film the zinc oxide must be a solid and no longer an aqueous dispersion in the final product. Thus, the final product claimed is a coated paper layer comprising zinc oxide particles, regardless of how the zinc oxide particles were added to the coated paper layer. Therefore, the article made by the combination of Shaw in view of Sugimoto teaches the claimed invention.

4. The 35 U.S.C. 103 rejections of claims 10-12, 15-17, and 20 over Keough in view of Sugimoto are repeated for the reasons set forth in the previous Office Action mailed April 5, 2004, Pages 9-10 Paragraph 11 and the Office Action mailed September 2, 2004, Pages 2-4 Paragraph 4.

Regarding the newly added limitation to claims 10 and 15 that the composition comprises an aqueous acrylic resin base, the limitation that the acrylic resin base is aqueous during the formation of the article receives little patentable weight in an

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article claim. Articles are defined by the final structure of the product and not the intermediate steps of the materials used to form the article. Although all limitations are given consideration, patentability lays in the structure not the method of making the article. See MPEP 2113. In this case, in light of the instant specification, the aqueous acrylic resin claimed is merely the intermediate product and that the solution is formed into a final product such as a coating, laminae, or self-sustaining film. Therefore, in order to form that coating, laminae, or self-sustaining film the zinc oxide must be a solid and no longer an aqueous dispersion in the final product. Thus, the final product claimed is a package or laminate comprising a composition comprising acrylic resin, regardless of how the composition was formed and brought into contact with the other layers. Therefore, the article formed by the combination of Keough and Sugimoto teaches the claimed invention.

5. The 35 U.S.C. 103 rejections of claims 13 and 18 over Keough in view of Sugimoto and Felter are repeated for the reasons set forth in the previous Office Action mailed April 5, 2004, Pages 10-11 Paragraph 12, and the Office Action mailed September 2, 2004, Pages 6-7 Paragraph 7.

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Regarding the newly added limitation to claim 7 that the zinc oxide particles are an aqueous dispersion of zinc oxide particles, the limitation that the zinc oxide particles are in an aqueous dispersion during the formation of the article receives little patentable weight in an article claim. Articles are defined by the final structure of the product and not the intermediate steps of the materials used to form the article. Although all limitations are given consideration, patentability lays in the structure not the method of making the article. See MPEP 2113. In this case, in light of the instant specification, the aqueous dispersion of zinc oxide particles claimed is merely the intermediate product and that the dispersion is formed into a final product such as a coating, laminae, or self-sustaining film. Therefore, in order to form that coating, laminae, or self-sustaining film the zinc oxide must be a solid and no longer an aqueous dispersion in the final product. Thus, the final product claimed is a package or laminate comprising zinc oxide particles, regardless of how the zinc oxide particles were added to the coated paper layer. Therefore, the article formed by the combination of Keough, Sugimoto and Felter teaches the claimed invention.

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ANSWERS TO APPLICANT'S ARGUMENTS

6. Applicant's arguments regarding the 35 U.S.C. 103 rejections of claims 5 and 7 over Shaw in view of Sugimoto have been fully considered but they are not persuasive.

In response to Applicant's argument that Shaw teaches away from an aqueous methyl methacrylate because Shaw teaches a hydrophobic thermoplastic film forming resin, Shaw teaches that the hydrophobic thermoplastic film forming resin is colloidally dispersible in water (col.2, 1.50-53). Therefore, the methyl methacrylate is aqueous at least as an intermediate product before being dried to form the film.

7. Applicant's arguments regarding the 35 U.S.C. 103 rejections of claims 10-12, 15-17, and 20 over Keough in view of Sugimoto have been fully considered but they are not persuasive.

In response to Applicant's argument that Sugimoto teaches away from an aqueous methyl methacrylate or acrylic resin and aqueous dispersion of zinc oxide particles because Sugimoto teaches that the resin base of Sugimoto is hydrophobic, it is well known in the art that a film can be formed from an aqueous solution and still be hydrophobic as evidenced by Shaw.

Therefore, Sugimoto does not teach away from the claimed

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invention and can be combined with Keough for the reasons cited previously.

8. Applicant's arguments regarding the 35 U.S.C. 103 rejections of claims 13 and 18 over Keough in view of Sugimoto and Felter have been fully considered but they are not persuasive.

In response to Applicant's argument that Sugimoto teaches away from an aqueous methyl methacrylate or acrylic resin and aqueous dispersion of zinc oxide particles because Sugimoto teaches that the resin base of Sugimoto is hydrophobic, it is well known in the art that a film can be formed from an aqueous solution and still be hydrophobic as evidenced by Shaw. Therefore, Sugimoto does not teach away from the claimed invention and can be combined with Keough and Felter for the reasons cited previously.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P Bruenjes whose telephone number is 571-272-1489. The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher P Bruenjjes


Examiner

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CPB

CPB

April 12, 2005


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

4/12/05